

# FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: Carroll County BOE

> Prepared By: Jim Strong MFC

Time Period Covered by This Plan: 2012 - 2021

Date Plan Prepared: 2012-02-15

Plan Type: Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

**Property Name: S16-T20N-R2E** 

## TABLE OF CONTENTS

LANDOWNER INFORMATION	3
FORESTER INFORMATION	3
DISCLAIMER	3
INTRODUCTION	3
OBJECTIVES	4
PROPERTY DESCRIPTION	4
GENERAL PROPERTY RECOMMENDATIONS	5
SOIL TYPES	7
STRATA	9
OTHER PLAN ACTIVITIES	11
PLAN MAP	13
PLAN MAP	14
STRATA ACTIVITY SCHEDULE	15

#### LANDOWNER INFORMATION

Name: Carroll County BOE

Mailing Address: P O Box 256

City, State, Zip: Carrollton, MS 38917 Country: United States of America

Contact Numbers: Home Number:

Office Number: 662-237-9276

Fax Number:

E-mail Address:

Social Security Number (optional):

#### FORESTER INFORMATION

Name: Jim Strong, Service Forester

Forester Number: 00898 Organization: MFC

Street Address: P O Box 95

City, State, Zip: Carrollton, MS 38917

Contact Numbers: Office Number: 662-237-6732

Fax Number:

E-mail Address: jstrong@mfc.state.ms.us

#### PROPERTY LOCATION

County: Carroll Total Acres: 657 Latitude: -90.09 Longitude: 33.6

Section: 16 Township: 20N Range: 2E

#### **DISCLAIMER**

This information was derived from a small sampling of the forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. These estimations are temporally static. Events and circumstances may occur within the survey area that will physically alter the forest resources and therefore will not be reflected in this plan.

#### INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

#### **OBJECTIVES**

#### Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

#### Wildlife Management - General

The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone

#### PROPERTY DESCRIPTION

#### General Property Information

This section of 640 acres is located in the North Western part of Carroll County primarly in the Mississippi Delta and is on the county line of Leflore and Carroll County. Most of the section is leased for farming of row crops. The Forest Land is comprised of bottomland hardwoods. One small shallow lake is found on the property which is surrounded by Tupelo and Cypress trees. A private gravel road runs through the section on top of the levee on both sides of Teoc Creek.

#### Water Resources

The drainages of this section are in the Will Neil Watershed. Teoc Creek flows through this section and is a tributary of the Yazoo River. The objective is to protect, preserve and enhance all water sources and drainages on or transecting the property. Mississippi Best Management Practices will be implemented during all aspects of the management of this property to minimize the impact on all water resources.

The old bar pits holds water for most the year. Other, intermittent streams and drains identified will be managed in accordance with Mississippi's Best Management Practices. A small lake is located in the Cypress and Tupelo Condition as well as water in the SW corner of the property.

#### Timber Production

The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

#### Threatened and Endangered Species

No threatened and endangered species were identified during the reconnaissance and evaluation of this property.

If any threatened and /or endangered species are discovered, immediate management procedures will be applied to protect these sensitive natural resources for future generations.

#### *Interaction with Surrounding Property*

Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

## Soils General

Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other adverse effects on the soil. The following soils are identified for this property: Adler Silt Loam, Dundee Silt Loam, Bruno Sandy Loam, Dubbs Silt Loam, Sharkey Clay, Adler Silt Loam and Sharkey Clay.

For a complete description of these soils, please see the Soil Type Section in this plan.

#### Archeological and Cultural Resources

No Archeological and Cultural Resources were identified during a reconnaissance of the property.

If any Archeological and/or Cultural Resources are discovered during the management of this property, immediate management practices will be applied.

#### GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A vigorous growing stand is the best defense to an attack form a variety of forest insects, plants and pathogens.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- · Heavy defoliation of hardwood leaves
- Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

#### Fire Protection

The Mississippi Forestry Commission will establish and maintain all firebreaks around the property and other forest management areas on the property. These firebreaks will help to protect your property from wildfires. All firebreaks will be established and maintained according to Mississippi Best Management Practices.

#### Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting area.

#### **Boundary Lines**

It is the responsibility of the landowner to ensure that all property lines and boundaries designating areas to receive forestry work are clearly identified and visible to all contractors.

**Note:** Some forest practices may cause temporary adverse environmental or aesthetic impacts. These practices will only cause short-term adverse impacts where they are installed. Special efforts will be made to minimize adverse effects when carrying out any of the practices. Examples include: site preparation, planting, prescribed fires, firebreak installation and maintenance, road installation and maintenance, pesticide applications and timber harvesting.

#### Water Quality Protection

The objective of the landowner is to protect, preserve and enhance all water sources on or transecting the property. This can best be achieved by implementation of Best Management Practices in all aspects of the management of the property.

#### Aesthetics

The goal is to assure that the property is managed in such a way that is aesthetically pleasing to the landowner as well as the community. Activities could include, maintaining buffer strips along the road and adjacent to the home site, planting wildflowers along the road, and trees with attractive fall and spring color along the drive and near the home site.

#### **Ecological Restoration**

Ecological restoration is the process of assisting the recovery of an ecosystem that has be degraded, damaged, or destroyed. A reconnaissance of the property has been conducted and no ecological restoration activities are recommended at this time.

#### Wildlife Mgt. Target Species

The objective of this practice is to provide habitat best suited for the featured or target species. Habitat management will focus on providing food, cover, water, and space to facilitate the target species.

#### Environmental Education

Environmental educational goals are to provide educational opportunities for children and adults through the development of items such as nature trails with tree identification markers, wildlife viewing areas, picnic areas, parking, public restroom facilities.

#### Wildlife Management General

The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining access roads and firelanes, providing openings within the forest, and leaving mast producing and den trees.

The forest land is leased to one hunting club which primarly hunts, deer, ducks and rabbits. The lake is located in the open water of the Tupel Gum- Cypress Strata and provides excellent duck hunting. Deer and rabbit hunting is excellent in the CRP Nuttall Oak plantation.

#### Timber Management

Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production throughout the life of the stand.

#### Recreation

According to landowner objectives the recreational use of the property could prove to be an avenue for personal enjoyment or for generating income. An evaluation of your property should be conducted and a plan developed to accomplish your specific goals for recreational activities on your property.

The lake provides for excellent fishing opportunities as well habitat for all types of waterfowl and water sources for all native wildlife.

#### **SOIL TYPES**

210

The Adler component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits.

Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria.

#### 3A

The Dundee component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

#### 13

The Bruno component makes up 90 percent of the map unit. Slopes are 0 to 3 percent. This component is on natural levees. The parent material consists of sandy alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 60 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3s. This soil does not meet hydric criteria. Loblolly Site Index = 93.

#### 2A

The Dubbs component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on natural levees. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria.

#### 27

The Sharkey component makes up 95 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of clayey alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is very high. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric

criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

21

The Adler component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

300

The Sharkey component makes up 95 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions. The parent material consists of clayey alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is very high. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

#### **STRATA**

Strata 1

Stand Description

This strata consists of the following stands: # 10, # 14, # 19 and # 23 for a total of 36.96 acres. This well stocked hardwood strata was hand planted in January 1998 with water oak, nut all oak and willow oak seedlings. The stand has approximately 330 oak hardwoods trees to the acre and is enrolled up under the CRP Program for a period of 15 years. The average diameter is 3 inches and the total height is approximately 20 feet tall. There is a firelane around all fields that is maintained by the leasee.

#### Stand Recommendations

These hardwood stands in Strata 2 will be managed on a 65year rotation. No activites are planned for this stand for the next 10 years.

The harwood stands provide excellent cover and food for the native wildlife.

Strata 2

#### Stand Description

This strata consists of the following stands: # 8 and # 18 for a total of 77.47 acres. These 2 stands consists of hardwood pulpwood of oaks, gums, maples and other species that was establised in 1991 when the tract was clear cut and all remaining stems were chainsawed down and the stand was allowed to be regenerated naturally.

There are approximately 154 hardwood trees per acre that average 5 inches in diameter with the average total height of 38 feet tall with a volume 20 tons per acre.

#### Stand Recommendations

These hardwood stands will be managed on a 65 year rotation. No activites are planned for this stand for the next 10 years. The stands will be monitored for beaver activity and other pest problems during our yearly routine inspections. During 2022 a possible hardwood thinning could take place.

These stands which are located next to the tupelo and cypress stands provide excellent cover and food for the native wildlife.

#### Strata 3

#### Stand Description

This strata consists of the following stands: # 9 and # 31 for a total of 66.07 acres located between 2 levees with Teoc Creek flowing though the middlle of the condition. This area was dug out years ago by the US Corps of Engineers and the soil was used to make the levee system from Teoc Creek flooding the adjacent farm land. This area stays flooded most of the year while some areas are always flooded because of the deep holes that that were dug out for the levee system. Approximately 356 willow, cottonwood and sycamore trees per acre that average 4 inches in diameter with an average total height of 28 feet and several different types of grass vegetation are found growing in this condition. The Corps of Engineers maintains the levee system .

#### Stand Recommendations

This land is not under any management at this time because it stays flooded most of the year. No activities are planned for the life of the plan.

The Corp of Engineers will have to be notifed prior to setting up any timber harvesting that may occur in the future.

The dug out areas provide for fishing as well as food and for all types of birds such as ducks, geese and other water wildlife use the water for food and resting areas. The willow thickets provide excellent cover for some of the native wildlife.

Strata 4

#### Stand Description

This strata consists of the following stands: #22, #30, #20, #21, # 24 and # 16 for a total of 64.53 acres that is a cypress and tupleo gum wet area that stays flooded almost all year long. A lake is located in the middle of this stand and stays flooded all the time.

The timber is approximately 54 years old and has 160 pulpwood and saw timber trees per acre that average 68 feet in total height. There are approximately 73 tons of hardwood sawtimber and 30 tons of hardwood pulpwood per acre.

#### Stand Recommendations

This land is not under any management at this time because it stays flooded most of the year. No activities are planned for the life of the plan. The lake and these stands keep water in them all year long and can not be logged.

In extrme droughts, the Mississippi Forestry Commission will be looking at these stands for possible timber harvesting when the site conditions become dry.

The lake provides for fishing as well as the flooded cypress and tupelo stands provide cover for the ducks and other native wildlife.

#### OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

The property boundary line is painted around all 4 miles of the section of land in red paint at eye level mainly on hacked marks and needs to re-painted approximately every 5 years.

#### Line Recommendations

The 4 miles of boundary lines will be repainted with red paint at eye level on the old hacked marks and all corners marked with a X to insure that the property boundaries are clearly identified.

#### **Activity Recommendations**

**Property Activities** 

Routine inspections and general maintenance of the roads, Firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

## **Property Activities**

The 4 miles of Boundary Lines will be repainted with red paint at eye level on the old hacked marks and all corners marked with an X during the summer of 2016

## **Property Activities**

Routine inspections and general maintenance of the roads, Firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

All property lines will be remarked with red paint during the summer of 2021.

## S16 T20N 2E Carroll County BOE



Property Property (1)		
Category 1: Stands Pulpwood (2) Sub-Merchantable (6) Sawtimber (6)		
Category 3: Non-Forest Stands Non-Forest (19)		
MFC Basemap		
County Boundary	Public School Districts	Physiographic Region
County Boundary (2)	CARROLL COUNTY SCHOOL DISTRICT (2)	Delta (2)
	LEFLORE COUNTY SCHOOL DISTRICT (2)	
Quadrangle Grid	A second of control of the control o	Soil Associations
USGS Quad (2)	US Congressional District	alligator-sharkey-forestdale (2
PLS Townships	US Cong Dist #2 (2)	morganfield-adler-convent (1)
PLS Townships (2)	MS Senate	forestdale-alligator-sharkey (2
PLS Townships (2)	14 (2)	Surface Geology
Survey Districts	14(2)	ALLUVIUM (2)
District 2 (2)	MS House	
DE P ANY LIMITED	32 (1)	MFC Districts
Blockgroup (Census 2000)	46 (1)	MFC Districts (1)
Blockgroup (Census 2000) (2)	Perennial Streams	MFC Dispatch Units
Block (Census 2000)		MFC Dispatch Units (1)
Block (Census 2000) (9)	Perennial Streams (5)	MFC Dispatch Units (1)
Diock (Cellada 2000) (5)	Hydrologic Units (Basins)	MS Outline
Tract/BNA (Census 2000)	YALOBUSHA RIVER ABOVE GRENADA DAM (2)	MS Outline (1)
Tract/BNA (Census 2000) (2)	1 American State of the Control of t	Company of the Compan
2 2 2	Historic Forest Boundary	
County Roads	Oak-Hickory-Magnolia-Poplar (2)	
County Roads (1)	MS Forest Habitat	
School Sections	MISCELLANEOUS ALLUVIAL FLOODPLAINS (2)	
School Sections (1)	YAZOO BILIFFI AND EPINGE (2)	



## **S16 T20N 2E Carroll County BOE**

Teoc 2012 to 2021 656.51 Acres





## Stand Activity Schedule for Carroll County BOE 16 20N 2E

Strata	Stand	Activity Acre	Est. Cost	Est. Revenue
			Ī	
		Yearly Totals 0	\$0.00	\$0.00
		Grand Totals 0	\$0.00	\$0.00